

PTO/SB/08A (10-01)

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Substitute for form 1449A/PTO		Complete If Known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(use as many sheets as necessary)</i>		Application Number 10/035,884 Filing Date 11/01/2001 First Named Inventor Eric Karplus Art Unit 2837-3 Examiner Name _____ Attorney Docket Number _____	
Sheet	1	of	4

U.S. PATENT DOCUMENTS

FOREIGN PATENT DOCUMENTS

FOREIGN PATENT DOCUMENTS					
Examiner Initials*	Cite No. 1	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Column(s), Line(s), Where Relevant Passages or Relevant Figures Appear/
		Country Code 3 - Number ⁴ - Kind Code ⁵ (if known)			

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¹ Applicant's unique citation designation number (optional). ² See *Kinds Codes of USPTO Patent Documents* at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

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PAGE 4/9 * RCV'D AT 5/5/2004 6:20:37 PM [Eastern Daylight Time] * SVR:USPTO-EFXRF-3/24 * DNI:2732435 * CSID:2066236793 * DURATION (mm:ss):04:28

PTO/SB/088 (10-01)

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INFORMATION DISCLOSURE
STATEMENT BY APPLICANT

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Sheet 2 of 4

Complete if Known

Application Number 10/035,684

Filing Date 11/01/2001

First Named Inventor Eric Karplus

Group Art Unit

Examiner Name

Attorney Docket Number

OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS

Examiner Initials ¹	Cite No. ²	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue numbers(s), publisher, city and/or country where published	T2
OG		APD References: C. CARRIER, R. LECOMTE, "Recent Results in Scintillation Detection with Silicon Avalanche Photodiodes", IEEE Trans. Nucl. Sci. 37(2), 209 (1990).	
OG		G.C. HUTH, "Recent results obtained with high field, internally amplifying semiconductor radiation detectors", IEEE Trans. Nucl. Sci. NS-13(1), 38 (1966).	
OG		F. MARTIN, G. ENTINE, R. FARRELL, "Measurements of the operating characteristics of a large-area avalanche photodiode", Optical Engineering, 31(1), 48 (1992).	
OG		M.R. SQUILLANTE et al, "Avalanche Diode Low Energy X-Ray and Nuclear Particle Detector", IEEE Trans. Nucl. Sci. 33(1), 336 (1986).	
OG		G.E. STILLMAN, C.M. WOLFE, Chapter 5 in "Semiconductors and Semimetals" R.K. Willardson, A.C. Beer Ed., Vol. 12, 291 (1977).	
		Beveled edge configuration: R. FARRELL, K. VANDERPUYE, G. ENTINE, M.R. SQUILLANTE, "High Resolution, Low Energy Avalanche Photodiode X-Ray Detectors", IEEE Trans. Nucl. Sci. 38(2), 144 (1991).	
		"Reach-through" configuration: J.A. HALGER et. al., "A time-of-flight detector based on silicon avalanche diodes", Nucl. Instrum. Meth. A337, 362 (1994).	

Examiner Signature

Peter Gehr

Date Considered

05/06/04

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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Substitute for form 1449B/PTO		Complete if Known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT		Application Number	10/035,684
(use as many sheets as necessary)		Filing Date	11/01/2001
Sheet	3	First Named Inventor	Eric Karplus
of 4		Group Art Unit	2875
		Examiner Name	
		Attorney Docket Number	

OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS			
Examiner Initials	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s) publisher, city and/or country where published	T ³
OG		Solid State Photomultiplier: J. KIM, Y. YAMAMOTO, H. HOGUE, "Noise free avalanche multiplication in Si solid state photomultipliers", Appl. Phys. Lett. 70(21), pp. 2852-2854 (1997).	
OG		Methods of obtaining position sensitive information from solid state detectors: SB KAUFMAN, BD WILKINS, MJ FLUSS, EP STEINBERG, "The response of position-sensitive detectors to fission fragments and other heavy ions", Nucl. Inst. Meth., 82, 117 (1970)	
OG		E. GRAMSCH, S. ZHANG, M. MADDEN, M. LINDBERG, M. SZAWLOWSKI, "High density avalanche photodiode array", Proc. SPIE Vol. 2022, Oct. 1993, p. 111-119.	
OG		Lateral effect photodiodes: R.B. OWEN, M.L. AWCOCK, "One and Two Dimensional Position Sensing Semiconductor Detectors", IEEE Trans. Nucl. Sci. NS-15, 290 (1968).	
OG		B. O. KELLY, "Lateral-Effect Photodiodes", Laser Focus, Mar. 1976, pp. 38-40.	
OG		K. KURASAWA, "An Application of PSD to Measurement of Position", Journal of the Japan Society of Precision Engineering, Vol 51, No. 4, 1985, pp. 730-737.	

Examiner Signature	<i>Orvel Gale</i>	Date Considered	05/06/04
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**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

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Sheet 4 of 4

Complete If Known

Application Number	10/035,684
Filing Date	11/01/2001
First Named Inventor	Eric Karpus
Group Art Unit	2876
Examiner Name	
Attorney Docket Number	

OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No. 1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	T ²
OG		Position sensitive readouts: M. LAMPTON, C.W. CARLSON, "Low distortion resistive anodes for two-dimensional position-sensitive MCP systems", Rev. Sci. Instrum. 50(9), Sept. 1979, pp.1093-1097.	
OG		J.S. LAPINGTON, J. MILNES, M. PAGE, M. INGLE, K. REES, "Novel Electronic Readout Systems For Photon Counting Imagers", Proc. of SPIE, Vol 4128, 2000, pp. 120-128.	
OG		C. MARTIN, P. JELINSKY, M. LAMPTON, R.F. MALINA, H.O. ANGER, "Wedge-and-strip anodes for centroid finding position-sensitive photon and particle detectors", Rev. Sci. Instrum. 52(7), Jul. 1981, pp.1067-1074.	

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Okl. 6/6

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